

## SECTION 15103 - GLOBE VALVES

### City of San Diego, CWP Guidelines

#### PART 1 -- GENERAL

##### 1.1 WORK OF THIS SECTION

- A. The WORK of this Section includes providing globe valves.

##### 1.2 RELATED SECTIONS

- A. The WORK of the following Sections applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.

- 1. Section 15100 Valves, General

##### 1.3 SPECIFICATIONS AND STANDARDS

- A. Except as otherwise indicated, the current editions of the following apply to the WORK of this Section:

- |               |                                                                   |
|---------------|-------------------------------------------------------------------|
| 1. ASTM A197  | Specification for Cupola Malleable Iron                           |
| 2. ATSM A307  | Specification for Carbon Steel Bolts and Studs 60,000 psi Tensile |
| 3. ASTM A 563 | Specification for Carbon and Alloy Steel Nuts                     |
| 4. ASTM B371  | Specification for Copper-Zinc-Silicon Alloy Rods                  |

#### PART 2 -- PRODUCTS

##### 2.1 GENERAL

- A. Globe valves for isolating and throttling service shall have screwed ends for sizes up to and including 2 inches, and 125 lb flanged ends for larger sizes. Unless otherwise indicated, all globe valves shall have manual handwheel actuators.

##### 2.2 GLOBE VALVES 2 INCHES AND SMALLER

- A. Globe valves with threaded ends shall have bronze bodies with union bonnets for class 150 rating, to the following material specifications or equal:
  - 1. Body and bonnet - Bronze, ASTM B62
  - 2. Disc - Teflon
  - 3. Disc holder and nut - Brass, or bronze ASTM B62

- |    |             |                                  |
|----|-------------|----------------------------------|
| 4. | Handwheel   | - Malleable iron                 |
| 5. | Packing     | - Nonasbestos fiber with Teflon  |
| 6. | Packing nut | - Bronze, ASTM B584              |
| 7. | Stem -      | Copper-silicon bronze, ASTM B371 |

## 2.3 GLOBE VALVES LARGER THAN 2 INCHES

A. Globe valves with flanged ends shall have cast iron bodies with flanged bonnet for class 125 rating to the following material specifications or equal:

- |     |                       |                                            |
|-----|-----------------------|--------------------------------------------|
| 1.  | Body                  | - Cast iron, ASTM A126, Class B            |
| 2.  | Bonnet studs and nuts | - Steel, ASTM A307 and A563, respectively  |
| 3.  | Disc                  | - Teflon                                   |
| 4.  | Disc holder           | - Bronze, ASTM B62                         |
| 5.  | Disc nut              | - Bronze, ASTM B584                        |
| 6.  | Handwheel             | - Malleable iron; cast iron above 4 inches |
| 7.  | Packing               | - Nonasbestos fiber with Teflon            |
| 8.  | Packing gland         | - Bronze, ASTM B584                        |
| 9.  | Packing gland flange  | - Malleable iron, ASTM A197                |
| 10. | Seat ring             | - Bronze, ASTM B62                         |
| 11. | Stem -                | Copper-silicon bronze, ASTM B584           |
| 12. | Yoke bonnet           | - Cast iron, ASTM A126, Class B            |
| 13. | Yoke bushing          | - Bronze, ASTM B584                        |

## 2.4 MANUFACTURERS

A. Products of the type indicated shall be manufactured by the following (or equal):

1. Valves 2 inches and smaller

Jenkins, [Figure 106B]  
 Stockham, [Figure B-22-T]  
 Walworth, [Figure 3095]

2. Valves larger than 2 inches

Jenkins, [Figure 142C]  
 Stockham, [Figure G-514-T]

### **PART 3 -- EXECUTION**

#### **3.1 INSTALLATION**

- A. Globe valves shall be installed in accordance with Section 15100 and with the manufacturer's written instructions.

**\*\* END OF SECTION \*\***